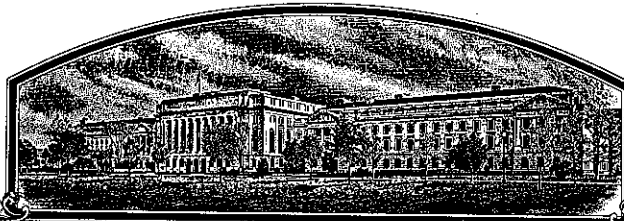


No.

9500289



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Ziller Seed Co., Inc.**

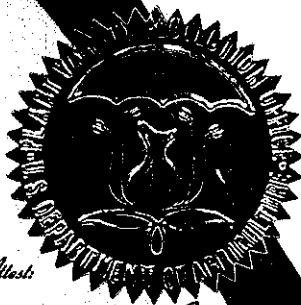
Whereas, THERE HAS BEEN PRESENTED TO THE  
**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (34 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'BT 2911'



Attest:

*Martha A. Smith*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*In Testimony Whereof, I have hereunto set  
my hand and caused the seal of the Plant  
Variety Protection Office to be affixed at  
the City of Washington, D.C. this twenty-ninth  
day of August in the year of our Lord  
one thousand nine hundred and ninety-seven.*

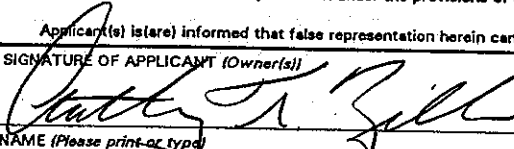
*Samuel J. Hildner*  
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**  
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Ziller Seed Co., Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME BT 2911
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) RR 1 Box 122 Bird Island, MN 55310		5. TELEPHONE (include area code) 612-365-3674	<b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER 9500289 DATE AUGUST 31, 1995 FILING AND EXAMINATION FEE \$2450.00 DATE AUGUST 31, 1995 CERTIFICATION FEE \$300.00 DATE JULY 15, 1997
		6. FAX (include area code) 612-365-3567	
7. GENUS AND SPECIES NAME Glycine max L.	8. FAMILY NAME (Botanical) Leguminosae		
9. CROP KIND NAME (Common name) Soybean			
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name) Corporation			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Minnesota		12. DATE OF INCORPORATION February, 1970	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Anthony T. Ziller Ziller Seed Co., Inc. RR 1 Box 122 Bird Island, MN 55310			14. TELEPHONE (include area code) 612-365-3674 15. FAX (include area code) 612-365-3567
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) <ul style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety</li> <li>b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness</li> <li>c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety</li> <li>d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety</li> <li>e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership</li> <li>f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository)</li> <li>g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)</li> </ul>			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)? <input type="checkbox"/> YES (If "yes," answer items 18 and 19 below) <input checked="" type="checkbox"/> NO (If "no," go to item 20)			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> YES (If "yes," give names of countries and dates) <input checked="" type="checkbox"/> NO			
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s)) 		SIGNATURE OF APPLICANT (Owner(s))	
NAME (Please print or type) Anthony T. Ziller		NAME (Please print or type)	
CAPACITY OR TITLE President	DATE 8/28/95	CAPACITY OR TITLE	DATE

## Exhibit A

## Origin and Breeding History

BT 2911 is a soybean cultivar derived from a cross of Mo40042 x Mo50032, developed via the single seed descent method of breeding.

Generation	Step	Year
F <sub>0</sub>	Hand cross	1986
F <sub>1</sub>	F <sub>1</sub> Increase	1986 Winter
F <sub>2</sub>	Single Seed Descent	1987
F <sub>3</sub>	Single Seed Descent	1987 Winter
F <sub>4</sub>	Single Seed Descent	1988
F <sub>5</sub>	Single Plant Selection	1989
F <sub>6</sub>	Yield Test, increase	1990
F <sub>7</sub>	Yield Test, increase	1991
F <sub>8</sub>	Yield Test, increase	1992
F <sub>9</sub>	Yield Test, increase	1993
F <sub>10</sub>	Increase	1994

Observations indicate that BT 2911 is uniform and stable within commercially acceptable limits. As is true with other soybean varieties, a small percentage of variants can occur within the commercially acceptable limits for almost any characteristic during the course of repeated multiplication.

**Exhibit B****Novelty Statement: BT 2911**

BT 2911 is most similar to Elgin. The main differences between BT 2911 and Elgin include, but are not necessarily restricted to the following:

1. BT 2911 has brown hila while Elgin has black hila.
2. BT 2911 has light tawny pubescence, while Elgin has tawny pubescence.

U.S. DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE  
 LIVESTOCK, MEAT, GRAIN & SEED DIVISION  
 PLANT VARIETY PROTECTION OFFICE  
 BELTSVILLE, MARYLAND 20705

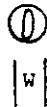
EXHIBIT C  
 (Soybean)

OBJECTIVE DESCRIPTION OF VARIETY  
 SOYBEAN (*Glycine max* L.)

NAME OF APPLICANT(S) ZILLER SEED CO., INC	TEMPORARY DESIGNATION	VARIETY NAME BT 2911
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) RR 1 BOX 122 BIRD ISLAND, MN 55310		FOR OFFICIAL USE ONLY PVPO NUMBER 9500289

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g.,   ).

## 1. SEED SHAPE:



1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)  
 3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)

2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)  
 4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

## 2. SEED COAT COLOR: (Mature Seed)

1 = Yellow      2 = Green      3 = Brown      4 = Black      5 = Other (Specify) \_\_\_\_\_

## 3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

1 = Dull ('Corsoy 79'; 'Braxton')      2 = Shiny ('Nebsoy'; 'Gasoy 17')

## 4. SEED SIZE: (Mature Seed)

Grams per 100 seeds

## 5. HILUM COLOR: (Mature Seed)

1 = Buff      2 = Yellow      3 = Brown      4 = Gray      5 = Imperfect Black      6 = Black      7 = Other (Specify) \_\_\_\_\_

## 6. COTYLEDON COLOR: (Mature Seed)

1 = Yellow      2 = Green

## 7. SEED PROTEIN PEROXIDASE ACTIVITY:

1 = Low      2 = High

## 8. SEED PROTEIN ELECTROPHORETIC BAND:

1 = Type A (SP1<sup>a</sup>)      2 = Type B (SP1<sup>b</sup>)

## 9. HYPOCOTYL COLOR:

1 = Green only ('Evans'; 'Davis')      2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')  
 3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')  
 4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

## 10. LEAFLET SHAPE:

1 = Lanceolate      2 = Oval      3 = Ovate      4 = Other (Specify) \_\_\_\_\_

11. LEAFLET SIZE:

- ☐ 2 1 = Small ('Amsoy 71'; 'A5312') 2 = Medium ('Corsoy 79'; 'Gasoy 17')  
3 = Large ('Crawford'; 'Tracy')

12. LEAF COLOR:

- ☐ 2 1 = Light Green ('Weber'; 'York') 2 = Medium Green ('Corsoy 79'; 'Braxton')  
3 = Dark Green ('Gnome'; 'Tracy')

13. FLOWER COLOR:

- ☐ 2 1 = White 2 = Purple 3 = White with purple throat

14. POD COLOR:

- ☐ 2 1 = Tan 2 = Brown 3 = Black

15. PLANT PUBESCENCE COLOR:

- ☐ 2 1 = Gray 2 = Brown (Tawny)

16. PLANT TYPES:

- ☐ 2 1 = Slender ('Essex'; 'Amsoy 71') 2 = Intermediate ('Amcor'; 'Braxton')  
3 = Bushy ('Gnome'; 'Govan')

17. PLANT HABIT:

- ☐ 3 1 = Determinate ('Gnome'; 'Braxton') 2 = Semi-Determinate ('Will')  
3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

18. MATURITY GROUP:

- ☐ 5 1 = 000 2 = 00 3 = 0 4 = I 5 = II 6 = III 7 = IV 8 = V  
9 = VI 10 = VII 11 = VIII 12 = IX 13 = X

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

BACTERIAL DISEASES:

☐ 0 Bacterial Pustule (*Xanthomonas phaseoli* var. *sojensis*)

☐ 0 Bacterial Blight (*Pseudomonas glycinea*)

☐ 0 Wildfire (*Pseudomonas tabaci*)

FUNGAL DISEASES:

☐ 0 Brown Spot (*Septoria glycines*)

Frogeye Leaf Spot (*Cercospora sojina*)

☐ 0 Race 1 ☐ 0 Race 2 ☐ 0 Race 3 ☐ 0 Race 4 ☐ 0 Race 5 ☐ 0 Other (Specify)

☐ 0 Target Spot (*Corynespora cassicola*)

☐ 0 Downy Mildew (*Petonospora trifoliorum* var. *manshurica*)

☐ 0 Powdery Mildew (*Microsphaera diffusa*)

☐ 0 Brown Stem Rot (*Cephalosporium gregatum*)

☐ 0 Stem Canker (*Diaporthe phaseolorum* var. *caulivora*)

## FUNGAL DISEASES: (Continued)

☐ Pod and Stem Blight (*Diaporthe phaseolorum* var; *sojae*)  
☐ Purple Seed Stain (*Cercospora kikuchii*)  
☒ Rhizoctonia Root Rot (*Rhizoctonia solani*)  
 Phytophthora Rot (*Phytophthora megasperma* var. *sojae*)  
☒ Race 1   ☒ Race 2   ☒ Race 3   ☒ Race 4   ☒ Race 5   ☒ Race 6   ☒ Race 7  
☒ Race 8   ☒ Race 9   ☒ Other (Specify) \_\_\_\_\_

## VIRAL DISEASES:

☐ Bud Blight (Tobacco Ringspot Virus)  
☐ Yellow Mosaic (Bean Yellow Mosaic Virus)  
☐ Cowpea Mosaic (Cowpea Chlorotic Virus)  
☐ Pod Mottle (Bean Pod Mottle Virus)  
☒ Seed Mottle (Soybean Mosaic Virus)

## NEMATODE DISEASES:

Soybean Cyst Nematode (*Heterodera glycines*)  
☒ Race 1   ☒ Race 2   ☒ Race 3   ☒ Race 4   ☒ Other (Specify) Race 14  
☐ Lance Nematode (*Hoplolaimus Colombus*)  
☐ Southern Root Knot Nematode (*Meloidogyne incognita*)  
☐ Northern Root Knot Nematode (*Meloidogyne Hapla*)  
☐ Peanut Root Knot Nematode (*Meloidogyne arenaria*)  
☐ Reniform Nematode (*Rotylenchulus reniformis*)  
☐ OTHER DISEASE NOT ON FORM (Specify): \_\_\_\_\_

## 20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

☒ Iron Chlorosis on Calcareous Soil  
☐ Other (Specify) \_\_\_\_\_

## 21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

☐ Mexican Bean Beetle (*Epilachna varivestis*)  
☐ Potato Leaf Hopper (*Empoasca fabae*)  
☐ Other (Specify) \_\_\_\_\_

## 22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	---	Seed Coat Luster	---
Leaf Shape	---	Seed Size	---
Leaf Color	---	Seed Shape	---
Leaf Size	---	Seedling Pigmentation	---

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

9500289

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/ POD
				CM Width	CM Length	% Protein	% Oil		
BT 2911 Submitted	9-19	3	102			34.6	18.3		
IA 2008 - Name of Similar Variety	9-20	3	112			34.1	18.6		

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBT1-A<sub>2</sub> in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.



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## Exhibit E

### Statement of the Basis of Applicant's Ownership: BT 2911

BT 2911 was developed by Ziller Seed Co., Inc. By agreement between Ziller Seed Co., Inc. and its employees, all rights of invention, discovery, or development made by an employee are assigned to Ziller Seed Co., Inc. No rights to such invention, discovery, or development are retained by any employees.